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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/655,806	09/04/2003	Teng-Chun Tsai	JCLA11376	7120

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J C PATENTS, INC.  
4 VENTURE, SUITE 250  
IRVINE, CA 92618

EXAMINER
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MCDONALD, SHANTESE L

ART UNIT	PAPER NUMBER
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3723

DATE MAILED: 02/09/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

88

<b>Office Action Summary</b>	<b>Application No.</b> 10/655,806	<b>Applicant(s)</b> TSAI ET AL.	
	<b>Examiner</b> Shantese L. McDonald	<b>Art Unit</b> 3723	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on 28 November 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☐ Claim(s) 4-6 and 12-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) 4-6 and 12-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 13-16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 13 claims that the first polishing operation is conducted until the top surface of the wafer is even. Therefore that is interpreted to mean that the first polishing operation is over once the top surfaces of the wafer are even. If this is the case, how can the claim go on to claim that, while the top surface is even, the first polishing operation is conducted at a first removal rate? Isn't the first operation complete once the top surface becomes even?

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 4-6 and 12-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hatanaka et al. in view of Lamphere et al.

Hatanaka et al. teaches a method of polishing a wafer comprising providing a first polishing pad, performing a first polishing operation on the first polishing pad to planarize the wafer, providing a second polishing pad, and performing a second polishing operation on the second polishing pad, and the first and second polishing operations being conducted at least at the same rate, and the second polishing operation being conducted at a rate faster than the first polishing operation, (col. 9, line 60-col. 10, line 6 and col. 12, lines 36-46). Hatanaka et al. teaches all the limitations of the claims except for the first and second polishing pads comprising a plurality of abrasive units each fabricated using an adhesive compound which comprises a resin, with evenly distributed cerium oxide abrasive particles therein, and the abrasive units shaped into a triangular cone, hexagonal cone or circular cylinder set up as an array. Lamphere et al. teaches polishing pads, 200, comprising a plurality of abrasive units, 210, each fabricated using an adhesive compound which comprises a resin, with evenly distributed cerium oxide abrasive particles, (col. 10, line 66-col. 11, line 1), and the abrasive units shaped into a triangular cone, hexagonal cone or circular cylinder set up as an array, (col. 16, lines 5-27). It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the method of Hatanaka et al. with the polishing pads, as taught by Lamphere et al. in order to enhance the systems polishing capabilities.

***Response to Arguments***

Applicant's arguments filed 11/28/05 have been fully considered but they are not persuasive.

The Applicant argues that the Bonner reference does not teach polishing at a second polishing rate, which is faster than the first polishing rate. The Bonner reference has been replaced with the Hatanaka et al. reference. This reference was cited to show that a multi-step polishing procedure of a semiconductor workpiece can be performed with the second polishing rate being faster than the first polishing rate. The Applicant argues about the Muilenberg et al. reference in the response of 11/28/06. The rejection of the 9/9/05 office action was based upon Bonner in view of Lamphere et al. The Muilenber et al. reference was not cited in the rejection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shantese L. McDonald whose telephone number is (571) 272-4486. The examiner can normally be reached on 8:00 a.m. - 4:30 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Hail can be reached on (571) 272-4485. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3723

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

S.L.M.  
January 24, 2006



Joseph J. Hall, III  
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